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IS 5974 (1986): divans and easy chairs [CED 35: Furniture]



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Indian Standard
SPECIFICATION FOR
DIVANS AND EASY CHAIRS
(*First Revision*)

UDC 684.428 + 684.433



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INDIAN STANDARDS INSTITUTION
MANAK BHAVAN, 9 BAHADUR SHAH ZAFAR MARG
NEW DELHI 110002

Indian Standard

SPECIFICATION FOR DIVANS AND EASY CHAIRS

(*First Revision*)

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Indian Standard

SPECIFICATION FOR DIVANS AND EASY CHAIRS

(*First Revision*)

0. FOREWORD

0.1 This Indian Standard (First Revision) was adopted by the Indian Standards Institution on 30 May 1986, after the draft finalized by the Furniture Sectional Committee had been approved by the Civil Engineering Division Council.

0.2 This standard was first published in 1970. In this revision, the tests for finished surface have been included. The revised standard also makes reference to the recent Indian Standards for various types of materials allowed in the standard.

0.3 For the purpose of deciding whether a particular requirement of this standard is complied with, the final value, observed or calculated, expressing the result of a test, shall be rounded off in accordance with IS : 2-1960*. The number of significant places retained in the rounded off value should be the same as that of the specified value in this standard.

1. SCOPE

1.1 The standard refers to domestic furniture and lays down requirements of materials and fixes the functional dimensions of divans and easy chairs with and without arm rests.

1.1.1 This standard does not apply to the bed-cum-sofas.

2. TERMINOLOGY

2.0 For the purpose of this standard, the following definitions shall apply.

2.1 Divan — A form of sitting room furniture capable of being used for either sitting, squatting or for relaxing in supine position.

*Rules for rounding off numerical values (revised).

2.2 Seat Height — The height of the seat means the distance of the top of the seat from the floor surface. In case of cushion seats or seats with springs, the height shall be measured after applying a uniform load of 60 kg on the entire surface of the seat meant for seating one person.

2.3 Soft Seat — A seat provided or covered with cushioning material.

2.4 Hard Seat — A seat without cushioning material.

3. MATERIALS

3.1 Filler Rods Electrodes — Filler rods electrodes for gas, arc and spot welding shall conform to IS : 1278-1972¹, IS : 814 (Part 1)-1974², IS : 814 (Part 2)-1974³ and IS : 4972-1968⁴.

3.2 Mild Steel Sheets — Mild steel sheets shall conform to IS : 513-1973⁵ and IS : 1079-1973⁶.

3.3 Mild Steel Tubes — Mild steel tubes shall conform to ERW quality of IS : 1161-1979⁷.

3.4 Aluminium Sheets — Aluminium sheets shall conform to designation 31500 or 40800 in H₂ condition of IS : 737-1974⁸.

3.5 Aluminium Tubes — Aluminium tubes shall conform to designation 62400, 63400 or 65032 of IS : 1285-1975⁹.

3.6 Screws — Screws shall conform to IS : 1365-1978¹⁰ or IS : 6760-1972¹¹.

3.7 Particle Board — Wood particle boards required for the manufacture of divans and easy chairs shall conform to IS : 3087-1986¹² and shall be of flat pressed three layer type.

¹Specification for filler rods and wires for gas welding (*second revision*).

²Specification for covered electrodes for metal arc welding of structural steel: Part 1 For welding products other than sheets (*fourth revision*).

³Specification for covered electrodes for metal arc welding of structural steel: Part 2 For welding sheets (*fourth revision*).

⁴Specification for resistance spot-welding electrodes.

⁵Specification for cold rolled carbon steel sheets (*second revision*).

⁶Specification for hot rolled carbon steel sheet and strip (*third revision*).

⁷Specification for steel tubes for structural purposes (*third revision*).

⁸Specification for wrought aluminium and aluminium alloys, sheet and strip (for general engineering purposes) (*second revision*).

⁹Specification for wrought aluminium and aluminium alloy, extruded round tube and hollow sections (for general engineering purposes) (*second revision*).

¹⁰Specification for slotted countersunk head screws (dia range 1.6 to 20 mm) (*third revision*).

¹¹Specification for slotted countersunk head wood screws.

¹²Specification for wood particle boards (medium density) for general purposes (*first revision*).

3.8 Veneered Particle Board — Veneered particle boards used for manufacture of divans and easy chairs shall conform to IS : 3097-1980¹. Both interior and exterior grade veneered particle boards may be used where air-drying paints or varnishes are to be used. Where suitable baking paints, enamels or varnishes are to be used, only exterior grade veneered particle boards shall be used.

3.9 Blockboards — Blockboards used shall conform to IS : 1659-1979².

3.10 Plywood — Plywood used shall conform to IS : 303-1975³. Any of the three grades of plywood, that is, BWR, WWR and CWR can be used where air-drying paints, enamel or varnishes are to be used or where the plywood is to be covered by decorative laminates. Where finishing is to be done with suitable oven-drying paints, enamels or varnishes, only BWR grade of plywood shall be used. The plywood used shall not be inferior to type B.

3.11 Timbers — Timbers to be used for lipping shall be well seasoned as given in IS : 1141-1973⁴. When timbers are used, sapwood of durable species and timbers of non-durable species shall be given a preservative treatment as specified in IS : 401-1982⁵. The moisture content of timber shall conform to IS : 287-1973⁶.

3.12 Decorative Plastic Laminates — Decorative plastic laminates used shall conform to IS : 2046-1969⁷ and shall be of the design and finish as prescribed by the purchaser.

3.13 Adhesives — Adhesives used for joining shall conform to IS : 848-1974⁸, IS : 851-1978⁹, IS : 852-1969¹⁰ or IS : 4835-1979¹¹.

3.14 Wooden screws shall conform to IS : 6760-1972¹².

3.15 Paint, enamel, polish and varnish shall be in accordance with the schedule given in IS : 2338 (Part 2)-1967¹³.

¹Specification for veneered particle boards (*first revision*).

²Specification for blockboards (*second revision*).

³Specification for plywood for general purposes (*second revision*).

⁴Code of practice for seasoning of timber (*first revision*).

⁵Code of practice for preservation of timber (*third revision*).

⁶Recommendations for maximum permissible moisture content for timber used for different purposes (*second revision*).

⁷Specification for decorative thermosetting synthetic resin bonded laminated sheets (*first revision*).

⁸Specification for synthetic resin adhesives for plywood (phenolic and aminoplastic) (*first revision*).

⁹Specification for synthetic resin adhesives for construction work (non-structural) in wood (*first revision*).

¹⁰Specification for animal glue for general wood-working purposes (*first revision*).

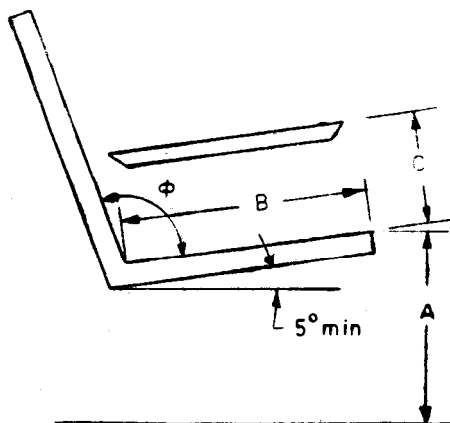
¹¹Specification for polyvinyl acetate dispersion-based adhesives for wood (*first revision*).

¹²Specification for slotted countersunk head wood screws.

¹³Code of practice for finishing of wood and wood-based materials: Part 2 Schedules.

4. DIMENSIONS

4.1 The dimensions for the divans and easy chairs shall be as in Fig. 1 and Table 1.



A = seat height

B = seat depth

C = armrest height

ϕ = included angle which should be 110° to 115°

FIG. 1 EASY CHAIR

TABLE 1 DIMENSIONS OF DIVANS AND EASY CHAIRS

SEAT HEIGHT	CLEAR SEAT DEPTH	HEIGHT OF ARMREST ABOVE SEAT
A	B	C
(1)	(2)	(3)
mm	mm	mm
380 to 400	525 to 600	150 to 230

5. SAMPLING AND TESTING

5.1 The following scheme of sampling shall be adopted for tests:

Size of Batch

No. of Samples

Up to 50

2

For every extra 200 or
part thereof in batch

1

5.2 Tests — Samples shall be drawn as given in 5.1 and subjected to inspection as indicated in 5.2.1, 5.3, 5.4 and tests as given in 5.4.1, 5.5, 5.6, 5.7 and 5.8.1.

5.2.1 The sample shall be checked to conform to the dimensions and tolerances as specified in 4.

5.3 Construction — The construction shall be checked for conformity to the particulars as given in 3.

5.4 The surface shall be checked to be smooth, uniform and free from any stain and warp.

5.4.1 Glue Adhesion — The adhesion of plastic or veneer overlay shall be tested in accordance with IS : 1734 (Part 5)-1972*. The bond shall be excellent.

5.5 Resistance of the Surface to Dry Heat — The finished surface of test sample shall be tested for resistance to dry heat in accordance with IS : 5807 (Part 1)-1975†. The minimum qualifying average ratings shall conform to 7 of IS : 5807 (Part 1)-1975†.

5.6 Resistance of the Surface to Wet Heat — The finished surfaces of wood shall be tested for resistance to hot water as given in IS : 5807 (Part 2)-1975‡. The minimum qualifying average ratings shall conform to 7 of IS : 5807 (Part 2)-1975‡.

5.7 Resistance of Surface to Marking by Liquids — The finished surface of the test sample shall be tested for resistance to marking by liquids in accordance with IS : 5807 (Part 4)-1975§. The minimum qualifying average rating shall conform to 8 of IS : 5807 (Part 4)-1975§.

5.8 Type Test

5.8.1 Resistance of Surface to Mechanical Damage — The surface of test sample shall be tested for impact, cross-cut and scrape tests in accordance with IS : 5807 (Part 6)-1978||. The rating shall conform to 5.3 of IS : 5807 (Part 6)-1978||.

6. MARKING

6.1 All divans and easy chairs shall be marked with a suitable mark identifying the manufacturer, the type and size.

*Methods of test for plywood: Part 5 Test for adhesion of plies (*second revision*).

†Method of test for clear finishes for wooden furniture: Part 1 Resistance to dry heat (*first revision*).

Method of test for clear finishes for wooden furniture:

‡Part 2 Resistance to wet heat (*first revision*).

§Part 4 Resistance to marking by liquids.

||Part 6 Resistance to mechanical damage.

6.1.1 The divans and easy chairs may also be marked with the ISI Certification Mark.

NOTE — The use of the ISI Certification Mark is governed by the provisions of the Indian Standards Institution (Certification Marks) Act and the Rules and Regulations made thereunder. The ISI Mark on products covered by an Indian Standard conveys the assurance that they have been produced to comply with the requirements of that standard under a well-defined system of inspection, testing and quality control which is devised and supervised by ISI and operated by the producer. ISI marked products are also continuously checked by ISI for conformity to that standard as a further safeguard. Details of conditions under which a licence for the use of the ISI Certification Mark may be granted to manufacturers or processors, may be obtained from the Indian Standards Institution.



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AMENDMENT NO. 1 SEPTEMBER 1993
TO
IS 5974 : 1986 SPECIFICATION FOR DIVANS AND
EASY CHAIRS

(First Revision)

(*Page 5, clause 3.11*) — Add the following new clause after 3.11 and renumber the subsequent clauses:

“3.12 Medium Density Fibreboard (MDF)

MDF used for the manufacture of divans and easy chairs shall conform to IS 12406 : 1988 ‘Specification for medium density fibreboard for general purposes’.

(CED 35)

Reprography Unit, BIS, New Delhi, India

**AMENDMENT NO. 2 FEBRUARY 1997
TO
IS 5974 : 1986 SPECIFICATION FOR DIVANS AND
EASY CHAIRS**

(First Revision)

(*Page 3, clause 0.2*) — Insert the following new clause after **0.2** and renumber the subsequent clauses:

‘0.3 A scheme of labelling environment friendly products to be known as ECO Mark is being introduced at the instance of the Ministry of Environment and Forests (MEF), Government of India. The ECO Mark shall be administered by the Bureau of Indian Standards (BIS) under the *BIS Act*, 1986 as per the Resolution No. 71 dated 21 February 1991 published in the Gazette of the Government of India. For a product to be eligible for ECO Mark, it shall also carry the Standard Mark of the BIS besides meeting additional optional environment friendly requirements.’

(*Page 4, clause 3.7*) — Insert the following at the end of the clause:

‘For ECO Mark, the particle board shall conform to the requirements specified in IS 3087 : 1985 for ECO Mark purposes.’

(*Page 5, clause 3.8*) — Insert the following at the end of the clause:

‘For ECO Mark, the veneered particle board shall conform to the requirements specified in IS 3097 : 1980 for ECO Mark purposes.’

(*Page 5, clause 3.9*) — Insert the following at the end of the clause:

“For ECO Mark, the blockboard shall conform to the requirements specified in IS 1659 : 1990 ‘Specification for block boards (*third revision*)’ for ECO Mark purposes.”

(*Page 5, clause 3.10*) — Substitute the following for the existing clause:

“3.10 Plywood—Plywood used shall conform to IS 303 : 1989 ‘Specification for plywood for general purposes (*third revision*)’.

3.10.1 For ECO Mark the plywood shall conform to the requirements specified in IS 303 : 1989 for ECO Mark purposes.”

(*Page 5, clause 3.11*) — Substitute the following for the existing clause:

Amend No. 2 to IS 5974 : 1986

‘3.11 Timber — Any species of timber specified in IS 13622 : 1993 ‘Indian timber for furnitures and cabinets — Classification’ shall be used in the manufacture of **divans and easy chairs**.

3.11.1 For ECO Mark, only species of timber as specified in IS 13622 : 1993 from sources other than natural forests, such as timber from industrial and social forestry plantations, shade trees from tea and coffee estates, etc, shall be used for the manufacture of divans and easy chairs.’

[*Page 5, clause 3.12 (see also Amendment No. 1)*] — Insert the following at the end of the clause:

‘For ECO Mark, the medium density fibreboard shall conform to the requirements specified in IS 12406 : 1988 for ECO Mark purposes.’

(*Page 6, clause 5*) — Insert the following new clauses after 5 and renumber the subsequent clauses:

‘6 ADDITIONAL REQUIREMENTS FOR ECO MARK

6.1 General Requirements

6.1.1 The product shall conform to the requirements of quality and performance as specified in the standard.

6.1.2 The manufacturer shall produce to BIS environmental consent clearance from the concerned State Pollution Control Board as per the provisions of the *Water (Prevention and Control of Pollution) Act, 1974* and *Air (Prevention and Control of Pollution) Act, 1981* alongwith the authorization, if required under the *Environment (Protection) Act, 1986*, while applying for ECO Mark.

6.2 Specific Requirements

The product shall conform to the specific requirements given for ECO Mark under relevant clauses of this standard.

NOTE — The manufacturer shall provide documentary evidence by way of certificate or declaration to this effect to the Bureau of Indian Standards while applying for ECO Mark.’

[*Page 8, clause 6.1.1 (renumbered as 7.1.1)*] — Insert the following at the end of the clause:

‘7.2 The criteria for which the product has been labelled as ECO Mark.’

(CED 35)

Reprography Unit, BIS, New Delhi, India